# Anoplophora chinensis (Förster, 1848) (=A. malasiaca (Th ompson, 1865) - Citrus longhorn beetle (Coleoptera, Cerambycidae). Chapter 14: Factsheets for 80 representative alien species

Daniel Sauvard

▶ **To cite this version:**

Daniel Sauvard. Anoplophora chinensis (Förster, 1848) (=A. malasiaca (Th ompson, 1865) - Citrus longhorn beetle (Coleoptera, Cerambycidae). Chapter 14: Factsheets for 80 representative alien species. Alien terrestrial arthropods of Europe, 4 (2), Pensoft Publishers, 2010, BioRisk, 978-954-642-555-3. hal-02928754

**HAL Id: hal-02928754**
**https://hal.inrae.fr/hal-02928754v1**

Submitted on 2 Sep 2020

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

## 14.6 – *Anoplophora chinensis* (Förster, 1848) (=*A. malasiaca* (Thompson, 1865) - Citrus longhorn beetle (Coleoptera, Cerambycidae)

Daniel Sauvard

**Description and biological cycle:** Large, 21–37 mm long, stout beetle with shiny black elytra marked with 10–12 white round spots (*Photo left*). Antennae long, basally marked with white or light blue bands. The larva is a legless grub creamy white in colour, up to 50 mm long when fully grown (*Photo right*). Polyphagous insect attacking over 100 species of broadleaved trees and shrubs (*Acer, Betula, Carpinus, Citrus, Corylus, Rosa* and deciduous shrubs). Adults can fly up to 1.5 km from their emergence place. Human-mediated long-distance dispersal is possible via infested wood movement or adults hitch-hiking on vehicles. Females lay eggs throughout their lifespan from spring to late summer. Fecundity varies from tens to more than a hundred eggs per female. Full development is achieved in one or two years depending on climate and egg-laying date. Larvae and pupae overwinter inside their tunnels in wood.

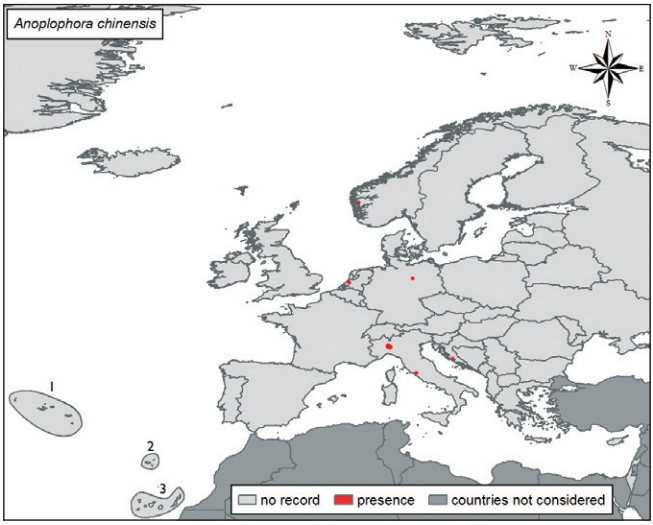
**Native habitat** (EUNIS code): G1- Broadleaved deciduous woodland; G5- Lines of trees, small anthropogenic woodlands.

**Habitat occupied in invaded range** (EUNIS code): G5- Lines of trees, small anthropogenic woodlands. Prefers subtropical to temperate climate; can survive in a large part of Europe.

**Native range:** East Asia (China, Taiwan, Korea, Japan, Myanmar, Vietnam).

**Introduced range:** Italy and a spot in the Netherlands (*Map*). First recorded in Lombardia, near Milano, Italy in 2000 but probably arrived several years earlier. Increasing frequency of interceptions during the last ten years in Europe. Eradicated in France and Great Britain. Italian populations from Lombardia recently spread in the peninsula, including the Roma area.


*Credit: Franck Hérard*




**Pathways:** Introduced with infested woody materials, especially bonsai plants.

**Impact and management:** Citrus longhorn beetle may disturb broadleaved forest ecosystems by selective tree killing or via direct/indirect competition with native xylophagous insects, including protected ones. Social impact occurs because in urban areas (streets, private and public gardens) the species kills trees and *Rosa* shrubs. This is one of the most destructive cerambycid pests of fruit orchards in its native range, especially on *Citrus* trees. Larval tunnels also depreciate harvested wood. This longhorn beetle is difficult to trap; surveys are generally based on visual detection of damage. Mechanical control involves destruction of infested trees by chipping or burning; trees can also be protected with fine wire meshes to prevent oviposition. Chemical control is of limited effect because the insects are deep within the tree, but systemic insecticides might be used. Biological control using natural enemies (parasitoid insects, entomopathogenic nematodes, fungi or bacteria) is under investigation but not yet being used.

**Selected references**

Colombo M, Limonta L (2001) *Anoplophora malasiaca* Thomson (Coleoptera Cerambycidae Lamiinae Lamiini) in Europe. Bollettino di Zoologia agraria e di Bachicoltura II Ser 33: 65–68.

EPPO (2010) *An*oplophora chinensis found again in the Netherlands. EPPO Reporting Services 2: 2010/025.

Hérard F, Ciampitti M, Maspero M, Krehan H, Benker U, Boegel C, Schrage R, Bouhot-Delduc L, Bialooki P (2006) *Anoplophora* species in Europe: infestations and management processes. *Bulletin OEPP/EPPO Bulletin* 36: 470–474.